

CLAIMS

CLAIM 1: In a method for applying adhesive-backed labels to moving articles in which individual labels are carried by a web and transferred to a vacuum drum, and from said vacuum drum are transferred to articles to be labeled and wherein faulty labels are identified by a scanner while the labels are still on said web, and in which faulty labels are removed from said vacuum drum prior to application to one of said articles on the basis of information obtained during said scanning, the improvement which comprises removing said faulty label by pressing against the adhesive surface of said faulty label a paper web that is moved at substantially the same tangential speed at its point of contact with the adhesive label as the tangential speed of the vacuum drum at the point of contact, and thereafter removing said paper web away from said vacuum drum, thereby moving said faulty label with said paper web, and thereafter scanning said paper web to verify and reconcile faulty label removal.

CLAIM 2: In a labeling system adapted to apply pressure-sensitive, adhesive-backed labels to articles at a label-applying station comprising a means for delivering articles to be labeled to said label-applying station and means for delivering pressure-sensitive, adhesive-backed labels to said label-applying station into juxtaposition with articles to be labeled such that the adhesive side of said adhesive-backed label intimately contacts and adheres to said contacted article, said label-delivery means comprising a vacuum drum adapted to hold adhesive-backed labels on said vacuum drum by vacuum means with the adhesive side of said label facing away from the surface of said vacuum drum, and further comprising an adhesive label delivery means adapted to deliver adhesive-backed labels to said vacuum drum with the nonadhesive surface of said label being placed on said drum, said adhesive-backed label delivery system comprising a web delivery system adapted to

receive and hold labels affixed hereto by the label adhesive and to be readily stripped therefrom, and a stripping means for removing labels adhered to said web and depositing them on said vacuum drum with the nonadhesive surface of the label contacting the surface of said vacuum drum, the improvement which comprises: (a) scanning means positioned in advance of said stripping means adapted to both identify faulty labels and the position of faulty labels relative to other labels being delivered to the vacuum drum and ultimately to the adhesive-backed label application means, and further adapted to send an electronic signal as to the fact of the existence of a faulty label and the position of said faulty label; (b) a label removal means positioned between said stripping means and said label application means for removing faulty labels from said vacuum drum upon the receipt of said electronic signal from said scanner, said label removable means comprising a continuous web of paper adapted to be pressed against the adhesive surface of an identified faulty label, and to be removed from contact once adherence is effected, said web being moved at the time of contact with said faulty label at a rate coordinated with the tangential rate of movement of said label on said vacuum drum at the point of contact; and (c) scanning means subsequent to the initial point of contact between said paper web and said faulty adhesive label for individually counting removed faulty labels and for verification of and reconciliation with the received information concerning faulty labels.